

Intermediate Econometrics I  
ECONOMICS EC2222A-001/002  
Department of Economics  
Western University

September 2020

**General Information:**

**Instructor:** Daniel Chaves  
**Office:** 4045 SSC  
**Phone:** 519-661-2111 ext. 85207  
**E-mail:** dchaves6@uwo.ca  
**Office hours:** online using Zoom  
Tuesday and Thursday from 8pm to 9pm ET (London, ON time)  
**Delivery mode:** online asynchronous  
**Course website:** <https://owl.uwo.ca/portal>  
**Undergraduate inquiries:** 519-661-3507 or SSC Room 4075 or [econugrd@uwo.ca](mailto:econugrd@uwo.ca)

**Registration:**

You are responsible for ensuring you are registered in the correct courses. If you are not registered in this course, the Department will not release any of your marks until your registration is corrected. You may check your timetable by using the Login on the Student Services website at <https://student.uwo.ca>. If you notice a problem, please contact your home Faculty Academic Counsellor immediately.

**Prerequisite Note:**

The prerequisites for this course are: (i) Economics 1021A/B and 1022A/B; **or** (ii) Economics 2001A/B and Calculus 1000A/B (with a mark no less than 60%), Calculus 1500A/B (with a mark no less than 60%) or the former Calculus 1100A/B (with a mark no less than 60%).

You are responsible for ensuring that you have successfully completed all course prerequisites, and that you have not taken any anti-requisite courses. Lack of prerequisites may not be used as a basis for appeal. If you are found to be ineligible for a course, you may be removed from it at any time and you will receive no adjustment to your fees. This decision cannot be appealed.

If you find that you do not have the course prerequisites, it is in your best interest to drop the course well before the end of the add/drop period. Your prompt attention to this matter will not only help protect your academic record, but will ensure that spaces become available for students who require the course in question for graduation.

**Course Objectives:**

This is an introductory course in probability and statistics. The main goal is to teach students how to use statistics and basic economic theory to read and interpret data. This knowledge is paramount to learn how to use math and economics to understand the real world.

## Course Learning Outcomes:

At the end of this course students should be able to: (i) interpret tables, graphs, and statistics used for describing data; (ii) apply probability theory to model random variables; (iii) estimate population parameters using point and interval estimators; (iv) evaluate and describe the properties of an estimator; and (v) test theories about population parameters (determine an appropriate test statistic; implement a formal hypothesis test and interpret the outcomes)

## Textbook(s) and Course Materials:

Newbold, Carson and Thorne “Statistics for Business and Economics” 8<sup>th</sup> edition (hereafter SBE).

MyLab: Part of the course assessment will be made using MyLab and hence access to it is mandatory. The course ID will be provided on OWL. Students must register using the @UWO email and student ID. Students who register using other email extension (e.g. gmail, outlook) will be removed from the class list and risk having their grades lost.

## Communication:

In addition to my scheduled office hours, you can contact me via email. Please ensure that you email me from your @UWO email. This will minimize the risk of your email being overlooked or perceived as spam.

## Technical Requirements

- Laptop or computer
- Stable internet connection
- Microphone
- Webcam

For technical support, see the OWL Help page or contact Western Technology Services Helpdesk (<https://wts.uwo.ca/about-wts/contact.html>). Google Chrome or Mozilla Firefox are the preferred browsers for OWL; update your browser frequently.

## Assessments and Grading:

Your grade in this course will be determined by a combination of homework, quizzes, one mid-term, a final exam, and participation. The following table provides the weights attributed to each assessment. It also provides the tentative schedule for the quizzes and exams.

Assessment	Tentative Date (*)	Tentative Time (*)	Length	Weight
Participation	Weekly basis			10%
Homework	Weekly basis	See (2)		10%

Assessment	Tentative Date (*)	Tentative Time (*)	Length	Weight
Quizzes	Sep 25; Oct 9; Oct 23; Nov 13; Nov 27	6pm – 8pm ET (London, ON time)	One hour	20%
Midterm	Oct 15th	6pm – 8pm ET (London, ON time)	Two hours	30%
Final	TBD	TBD	Two hours	30%

(\*) The dates and time for the quizzes, midterm and final are tentative and subject to change. Obviously, the instructor will keep students informed about the dates and time.

Here is how each assessment will work:

(1) Participation: By every Friday you should send me a question regarding the material covered on that week. The question should be sent using OWL and not via email. During the weekend I'll select the most frequently asked questions and address them with a video or handout. This assessment will be graded based on completion and not on any judgement of the question. Obviously, feel free to contact me if you have any pressing question or if your question is not selected.

(2) Homework: This assessment will be applied using the online platform MyLab and will consist of a set of multiple-choice, true-false or fill-in-the-blank questions. Every Monday 12pm ET a new homework will be available, and you will have until Sunday 10pm ET to complete the activity. Given the time window available to complete this activity, there will be no make-up homework.

(3) Quizzes: This assessment will be applied using MyLab or OWL and it will consist of a short set of multiple-choice and/or true-false questions. **Only the four best grades out of the five quizzes will be considered to compute students course grade.** The quizzes will be available during the (tentative) dates and time window listed in the previous table. Once you start the activity, you will have **\*one hour\*** or **\*until closing time\*** – whichever is shorter - to complete the activity. Students are forbidden from using any books, notes, study guides, diagrams, communication equipment such as a cell phone, computer programs or software, online resources or websites, or other aids unless authorized by the instructor; such authorization must be stated explicitly during the examination.

(4) Midterm and Final: These assessments will consist of a set of mixed format questions (multiple-choice, true-false, fill-in-the-blank, short answer). The midterm exam is cumulative until the date of its application. The final exam is also cumulative and can contain questions from any topic covered during the semester. Students are forbidden from using any books, notes, study guides, diagrams, communication equipment such as a cell phone, computer programs or software, online resources or websites, or other aids unless authorized by the instructor; such authorization must be stated explicitly during the examination.

## Policy Regarding Missed Quizzes and Exams:

**There will not be make-up quizzes.** In order to account for any unexpected event, **\*only the best four grades out of the five grades will be considered\***. It is worth noting that there will not be the reweighting of quizzes. Furthermore, if you use the self-report tool for one of the quizzes, then that quiz will be the one dropped. If you use the self-report for two quizzes, then one will be dropped but other will not and it will impact your grade.

**There will not be a make-up midterm.** Students who miss the midterm will have a final exam with a weight of 60%. Students who miss the final will have a make-up final. The make-up final will potentially be in a different format, platform, and proctored online. Students who miss both midterm and final can take the make-up final with the 60% weight.

In order to receive accommodation, students who miss the midterm and/or final exam must follow Western's procedure for approval of their absence. For details on this procedure, see the section Please Note Department Policies for 2020-2021.

## Topics Covered and Readings:

- 1) Introduction: descriptive statistics and probability theory (Chapters 1 – 3, SBE)
- 2) Probability distributions: discrete random variables and probability distributions; continuous random variables and probability distributions, random sampling and sampling distributions (Chapters 4 – 6, SBE)
- 3) Estimation: point estimations and confidence intervals (Chapters 7 – 8, SBE)
- 4) Hypothesis testing: general principles of testing hypotheses; test of hypotheses about population parameters (means, proportions, differences in means and proportions and variances); relation between hypothesis testing and confidence intervals (Chapters 9 – 10, SBE)
- 5) Simple regression (if time allows): estimation of linear models; least square methods and properties of the estimators; assumptions of the simple regression model and inference (Chapter 11, SBE)

## Professionalism, Privacy and Copyright:

- Students are expected to follow the [Student Code of Conduct](#).
- All lectures and course materials, including slides, presentations, outlines, and similar materials, are protected by **copyright**. Students may take notes and make copies of course materials for their own educational purposes only.
- Students may not record lectures, reproduce (or allow others to reproduce), post or distribute lecture notes, assessments, or any other course materials publicly and/or for commercial purposes without written consent.
- Recordings (audio or video) are not permitted without explicit, written permission. Permitted recordings may not be distributed or shared.
- Students are expected to follow online etiquette expectations provided on OWL (*if*

*applicable; otherwise delete this bullet point)*

- Students will be expected to take an academic integrity pledge before some assessments (*if applicable; otherwise delete this bullet point*) Some sessions may be recorded by the instructor. Recorded sessions will remain within the course site or unlisted if streamed (*if applicable; otherwise delete this bullet point*)

**Tips on How to Be Successful in this Class:** Students in this class should understand the level of autonomy and self-discipline required to be successful.

- Make it a daily habit to log onto OWL to ensure you have seen everything posted to help you succeed in this class.
- Follow weekly checklists created on OWL or create your own to help you stay on track.
- Treat this course as you would a face-to-face course. Take notes as you go through the lesson material. Keeping handwritten notes or notes in a regular Word document will help you learn more effectively than just reading or watching.
- Connect with others. Try forming an online study group and meet on a weekly basis for study and peer support.
- Do not be afraid to ask questions. If you have questions or are struggling with a topic, check the online discussion boards or contact your instructor(s) and or teaching assistant(s).

**Please Note**  
**Department & University Policies for 2020-2021**

The University expects all students to take responsibility for their own Academic Programs. Students should check their registration to ensure they are enrolled in the correct courses.

**Academic Rights and Responsibilities:** Students should be familiar with their “Academic Rights and Responsibilities” as outlined [here](#) in the Western Academic Calendar. Claiming that “you didn’t know what to do” is not an acceptable excuse for not following the stated procedures.

**Guidelines and Policies for Students** are posted online in the current Western Academic Calendar at <http://westerncalendar.uwo.ca>. Undergraduate information for the Faculty of Social Science can be found at: <https://www.ssc.uwo.ca/undergraduate/index.html> and for the Department of Economics at: <https://economics.uwo.ca/undergraduate/index.html>.

**Rules of Conduct for Examinations:** Students are expected to know the university’s Rules of Conduct for Examinations, available [here](#).

**Cheating and Academic Offences:** Students are responsible for understanding what it means to “cheat.” The Department of Economics treats cheating and other academic offences very seriously and will investigate any suspect behavior. Students found guilty will incur penalties that could include a failing grade or being barred from future registration in Economics courses or programs. The University may impose further penalties such as suspension or expulsion.

**Plagiarism:** Plagiarism is an academic offence. Students must write their essays and assignments in their own words. Ideas/passages taken from another author must be referenced with footnotes or citations and acknowledged with quotation marks where appropriate. Western University uses software to check for plagiarism and students may be required to electronically submit their work. Those found guilty will be penalized as noted in point 3. See Scholastic Discipline for Undergraduate Students [here](#) in the Western Academic Calendar.

**Academic Appeals:** Students should refer to the Student Academic Appeals section [here](#) in the Western Academic Calendar. Please note the relevant deadlines.

**Department Appeals Procedures:** The Department will not consider an appeal unless an attempt has been made to settle the matter with the instructor first. Students who remain dissatisfied with the outcome may submit a written appeal to the Undergraduate Director in Economics, stating the reasons for their appeal. Information on the Department of Economics’ appeals procedure and the appeals form are available [here](#).

**Systematic Adjustments:** Systematic adjustments of class grade distributions (either up or down) can occur in Economics courses. The systematic adjustment of a class grade distribution is **not** grounds for an appeal.

**Add/drop deadlines:**

Deadline to add a first term half course:

**Thursday September 17, 2020**

Deadline to drop a first term half course:

**Thursday November 12, 2020**

**Oversleeping or Misreading the Exam Schedule:** Faculty of Social Science policy states that oversleeping or misreading the exam schedule is NOT grounds for a makeup. This rule applies to all exams in the Department of Economics.

**End of Term Travel:** Students must book travel arrangements AFTER final exam dates have been posted; travel is not an acceptable excuse for absence from a final exam.

**Rewriting Exams and Retroactive Reweighting are NOT Permitted:** Students who proceed to write a test or examination must be prepared to accept the mark. Rewriting tests or examinations, or retroactive reweighting of marks, is **not** permitted.

**Accommodation Policies:** Students with disabilities should work with Accessible Education (formerly SSD), which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The accommodation policy can be found here: [Academic Accommodation for Students with Disabilities](#).

**Academic Consideration for Student Absence:** Students will have up to two (2) opportunities during the regular academic year to use an on-line portal to self-report an absence during the term, provided the following conditions are met: the absence is no more than 48 hours in duration, and the assessment for which consideration is being sought is worth 30% or less of the student's final grade. Students are expected to contact their instructors within 24 hours of the end of the period of the self-reported absence, unless noted on the syllabus. Students are not able to use the self-reporting option in the following circumstances:

- for exams scheduled by the Office of the Registrar (e.g., December and April exams)
- absence of a duration greater than 48 hours
- assessments worth more than 30% of the student's final grade
- if a student has already used the self-reporting portal twice during the academic year

If the conditions for a Self-Reported Absence are *not* met, students will need to provide a Student Medical Certificate if the absence is medical or provide appropriate documentation if there are compassionate grounds for the absence in question. Students are encouraged to contact their Faculty academic counselling office for more information about the relevant documentation. It is strongly recommended that students notify the instructor as soon as possible, ideally before the assessment, when they become aware of an absence. University policy is that students must communicate with their instructors no later than 24 hours after the end of the period covered by the SMC or immediately upon their return from their documented absence. Failure to follow University policy and procedures may result in denial of academic accommodation and a grade of zero.

Individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds or for other reasons. **All required documentation for absences that are not covered by the Self-Reported Absence Policy must be submitted to the Academic Counselling office of a student's Home Faculty.**

For Western University policy on Consideration for Student Absence, see:  
[Policy on Academic Consideration for Student Absences - Undergraduate Students in First Entry Programs.](#)

For the Student Medical Certificate (SMC), see:  
[http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/medicalform.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf).

**Religious Accommodation:** Students should consult the University's list of recognized religious holidays and should give reasonable notice in writing, prior to the holiday, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the [Western Multicultural Calendar](#).

**Policy Regarding Class Attendance and Engagement:** If the instructor deems a student's attendance or engagement in the class to be unsatisfactory, that student may be prohibited from writing the final examination. Examples of unsatisfactory class engagement include frequent absences from an in-person or synchronous online class, lack of assignment submissions, and inadequate use of online course materials. Instructors who intend to make use of this policy will notify the student in advance.

**Statement on Mental Health and Support Services:** Students under emotional/mental distress should visit [http://uwo.ca/health/mental\\_wellbeing/](http://uwo.ca/health/mental_wellbeing/) for more information and a complete list of resources on how to obtain help.